

Entrez PubMed Nucleotide Protein Genome Structure OMIM PMC Journals Book

Search PubMed for [] Go Clear

☒ Limits Preview/Index History Clipboard Details

Display Abstract Show: 20 Sort Send to Text

About Entrez

Text Version

1: J Biochem (Tokyo). 1996 Jul;120(1):104-10.

Related Articles, L

Entrez PubMed
Overview
Help | FAQ
Tutorial
New/Noteworthy
E-Utilities

PubMed Services
Journals Database
MeSH Database
Single Citation Matcher
Batch Citation Matcher
Clinical Queries
LinkOut
Cubby

Related Resources
Order Documents
NLM Catalog
NLM Gateway
TOXNET
Consumer Health
Clinical Alerts
ClinicalTrials.gov
PubMed Central

Purification and characterization of a marine bacterial beta-galactoside alpha 2,6-sialyltransferase from Photobacterium damsela JT0160.

Yamamoto T, Nakashizuka M, Kodama H, Kajihara Y, Terada I.

Sea Water Science Research Laboratory, Japan Tobacco Inc., Kanagawa.

A bacterial sialyltransferase, named sialyltransferase 0160, was purified from a marine bacterium that had been isolated from seawater from Sagami Bay, Kanagawa. This strain has been identified as Photobacterium damsela, and named P. damsela JT0160. Sialyltransferase 0160 was purified 688-fold to homogeneity from the crude extract of the cells with a yield of 19% using a combination of anion exchange chromatography, hydroxyapatite chromatography, gel filtration chromatography, and affinity chromatography. The purified enzyme migrated as a single band (61 kDa) on sodium dodecyl sulfate-polyacrylamide gel. This sialyltransferase was found to be a beta-galactoside alpha 2,6-sialyltransferase [EC 2.4.99.1] which catalyzes the incorporation of NeuAc from CMP-NeuAc into the galactose residue of the carbohydrate chain at position 6 on the basis of an analysis of the enzymatic reaction products with HPLC, ¹H-, ¹³C-NMR spectroscopy, and fast atom bombardment mass spectroscopy.

PMID: 8864851 [PubMed - indexed for MEDLINE]

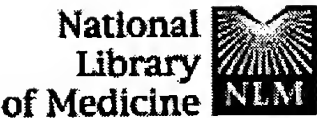
Display Abstract Show: 20 Sort Send to Text

BP 5/1/96

Not yet used

Write to the Help Desk
NCBI | NLM | NIH
Department of Health & Human Services
Privacy Statement | Freedom of Information Act | Disclaimer

Oct 4 2004 14:



Entrez PubMed Nucleotide Protein Genome Structure OMIM PMC Journals Book

Search PubMed for

☒ Limits Preview/Index History Clipboard Details

Abstract Text

About Entrez

Text Version

☐ 1: Glycobiology. 1991 Sep;1(4):357-65.

Related Articles, L

- Entrez PubMed
- Overview
- Help | FAQ
- Tutorial
- New/Noteworthy
- E-Utilities

- PubMed Services
- Journals Database
- MeSH Database
- Single Citation Matcher
- Batch Citation Matcher
- Clinical Queries
- LinkOut
- Cubby

- Related Resources
- Order Documents
- NLM Catalog
- NLM Gateway
- TOXNET
- Consumer Health
- Clinical Alerts
- ClinicalTrials.gov
- PubMed Central

Complete nucleotide and deduced protein sequence of CMP-NeuAc: poly-alpha-2,8 sialosyl sialyltransferase of Escherichia coli K1.

Weisgerber C, Hansen A, Frosch M.

Institute fur Medizinische Mikrobiologie, Medizinische Hochschule Hannover, FRG.

Poly-alpha-2,8 N-acetylneuraminic acid (polySia) is an important virulence factor in infections caused by Escherichia coli K1 and Neisseria meningitidis B. In E. coli K1 a membranous CMP-NeuAc: poly-alpha-2,8 sialosyl sialyltransferase (polysialyltransferase) complex catalyses the synthesis of linear polySia chains. The complex also elongates sia oligomers that serve as exogenous acceptors. The gene encoding a polysialyltransferase E. coli has been identified by subcloning and DNA sequence analysis. The subcloned DN fragment codes for a polypeptide with a molecular mass of 47 kDa catalysing the in vitro synthesis of polySia by elongation of exogenous acceptors.

PMID: 1820197 [PubMed - indexed for MEDLINE]

Abstract Text

Adonis

[Write to the Help Desk](#)
[NCBI](#) | [NLM](#) | [NIH](#)
Department of Health & Human Services
[Privacy Statement](#) | [Freedom of Information Act](#) | [Disclaimer](#)

Oct 4 2004 14: